

CLAIMS

1. A method for manufacturing an antenna of a hybrid contact-contactless or contactless smart card that includes a support (10 or 11) on which the antenna is made, two card bodies on each side of said support, each of said card bodies consisting of at least one thermoplastic layer, and a chip or a module connected to the antenna.

characterized in that it includes the steps of:

- depositing a layer of a material mainly consisting of resin on a predetermined zone (12 or 13) on said antenna support, said zone corresponding to the imprint of the antenna or being slightly larger than it,

- manufacturing the antenna, consisting in screen printing turns (14 or 15) and two connection pads (16, 18 or 17, 19) of electrically conductive ink on said zone (12 or 13) prepared beforehand on said support and subjecting said support to a heat treatment in order to bake said ink.

2. The manufacturing method according to claim 1, in which said material layer is an offset type ink.

3. The manufacturing method according to claim 2, in which said ink mainly consists of rosin.

4. The manufacturing method according to claim 2, in which said ink mainly consists of epoxy cyanoacrylate type resin.

5. The manufacturing method according to any one of claims 1 to 4 characterized in that said two card bodies are laminated on each side of said support (10 or 11) in two steps, the first lamination step consisting in welding on each side of said antenna support (10 or 11) two homogenous thermoplastic sheets (32, 34 or 33, 35) by hot press moulding at a temperature sufficient for the material that makes up the sheets to soften and to flow completely so as to eliminate all differences in thickness of the support, and

a second lamination step performed after a duration corresponding to the time required for said thermoplastic sheets (32, 34 or 33, 35) to solidify, said second step consisting in welding on the antenna support of constant thickness obtained after the first lamination step two layers of plastic material (42, 44 or 43, 45), constituting the body of the card, by hot press moulding.

6. The manufacturing method according to any one of claims 1 to 4, characterized in that said two card bodies are laminated on each side of said support (10 or 11) according to a single lamination step consisting in welding on each

side of said antenna support (10 or 11) at least two thermoplastic layers.

7. A hybrid contact-contactless or contactless smart card featuring an antenna on a support (10 or 11), said antenna consisting of at least one turn of electrically conductive ink screen printed on said antenna support, two card bodies on each side of said support, each of said card bodies consisting of at least one layer of plastic material, and a chip or module connected to the antenna

characterized in that the antenna consisting of turns (14 or 15) and two connection pads (16, 18 or 17, 19) of conductive ink is screen printed on a zone (12 or 13) of the antenna support, said zone corresponding to the imprint of the antenna or being slightly larger than the latter and on which a material consisting mainly of resin has been deposited.

8. The smart card according to claim 7, in which said material layer is an offset type ink.

9. The smart card according to claim 8, in which said ink mainly consists of rosin.

10. The smart card according to claim 8, in which said ink mainly consists of epoxy cyanoacrylate type resin.